

IN THE ABSTRACT:

Please amend the abstract as follows. No new matter has been introduced.

The present invention relates to an optoelectronic sensor for 5
5 demodulating a modulated photon flux (50), and to a measuring device, in particular for 3D
distance measurement, having at least one optoelectronic sensor of this type. The
optoelectronic sensor has at least two collecting zones 10 (~~20, 22~~) introduced in a
semiconductor region (10), which collecting zones are for example diffused into the
semiconductor region and doped inversely with respect to the semiconductor region (10).
10 The collecting zones (~~20, 22~~) serve for collecting and tapping off minority carriers 15
generated upon penetration of a modulated photon flux (50). Furthermore, at least two
control zones (~~32, 34~~) are introduced in the semiconductor region (10), which control zones
generate a drift field in a manner dependent on a control voltage that can be applied to the
control zones (~~32, 20-34~~), the control zones (~~32, 34~~) being of the same doping type as the
15 semiconductor region (10).

(~~Figure 1~~)